SPECIFICATION AMENDMENTS

TITLE AMENDMENT

VANDAL PROOF SYSTEM FOR SECURING ~~STONE PRODUCTS TO SUPPORTING STRUCTURE~~ A FRANGIBLE FACING PLATE TO RIGID SUPPORTING STRUCTURE BY WEDGING ACTION AND A METHOD THEREFOR.

SPECIFICATION TEXT AMENDMENTS

Please substitute herewith submitted paragraphs 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30 for the corresponding paragraphs as originally submitted.

[19] The fastening assembly 22 includes a ~~torx~~ TORX screw, known generically as a star screw, indicated generally at 31, a short piece of tubing, preferably made of stainless steel, indicated generally at 32, and a conventional rivet nut indicated generally at 33.

[20] Rivet nut 33 has a thick base portion 34, which is threaded as at 35 to receive the ~~torx~~ star screw 31, and a ~~think~~ thin shank portion 36 which terminates in flange 37. Tubing 32 has four slots, three of which are indicated at 38, 39 and 40 in its right or front end. The head 41 of star screw 31 has been modified slightly in that the side wall of the head is tapered inwardly as at 42 toward the shank portion 43. The diameter of flat end 26 of head 41 plus double the thickness of the wall of tubing 32, when added together, are slightly less than the diameter of rear hole 24.

[21] Figure 3 illustrates the fastening assembly 22 in an activated condition. Initially the thick base portion 34 and thin shank portion 36 are slid into hole 28 until flange 37 butts against the right outside surface (as viewed in Figure 2) of wall 29 of the supporting structure 21. A tool, not shown, having a snout which has an external thread which mates with thread 35 is then threadably engaged with the threaded hole in base 34. The handles on the tool are closed, forcing the thick base portion 34 with the threaded hole 35 against the inside face of wall 29, crimping the thin shank 36 in the process, until the ~~riven~~ rivet nut 33 assumes the

contour shown in Figure 3; i.e.: with the thin shank portion 36 crimped outwardly to form a flange 51 which, in cooperation with flange 37, locks the rivet nut 33 to the supporting structure. The tool is removed, leaving the rivet nut pre-set in the supporting structure.

[22] Thereafter, tubing 32 is slid onto shank portion 43 of the ~~torx security~~ star screw 31 with the end containing slots 38, 39 and 40 butted against the tapered portion 42 of the head 41. Since the length of tubing 32 is shorter than the length of screw shank 43, the threaded end 44 of the star screw 31 will project outwardly from the smooth end 45, see Figure 2, of the tubing 32. The threaded end 44 of screw 31 is then threaded a few turns into the threaded hole 35 in the thick base portion 34 of the pre-positioned rivet nut 33. The hole 24 in faceplate 10 is then slipped over the head 41 of ~~torx~~ star screw 31 and the slotted end of tubing 32. Further tightening of ~~torx~~ star screw 31 drives the threaded end 44 of the screw 31 deeper into the threaded hole 35 of the rivet nut 33. As the screw turns in deepening engagement with threaded hole 35 the prongs which are formed between the slots, two of which are illustrated at 47 and 48 in Figure 2, begin to expand outwardly into tight engagement with the inner circular wall of rear hole 24 of faceplate 10 under the expanding force of tapered surface 42 on head 41.

[23] From Figure 3 it will be seen the above described components are so contoured that when the tapered head 42 of ~~torx~~ star screw 31 has wedged

the elastically deformable prongs 47, 48 into tight engagement with the wall surface of hole 24, the face 26 of ~~torx~~ star screw 31 is spaced a slight distance inwardly from hole seat 20.

[24] The ~~torx~~ star screw 31 is activated by the ~~torx~~ star screwdriver indicated generally at 54 in Figure 4. Screwdriver 54 has a handle 55, a shank, indicated generally at 56, and a head indicated generally at 57. Head 57 terminates in six ribs, two of which are indicated at 58 and 59 in Figures 4 and 5. All six ribs are shown in Figure 5 but are not numbered for purposes of clarity.

[25] Referring now to Figure 7 it will be seen that ~~torx~~ star screw head 41 has a star shaped socket indentation 53 having six seats formed therein, said socket matching the fluted or ribbed head 57 of screwdriver 54. Two seats 60 and 61 of the socket 53 would receive flutes or ribs 58 and 59 of the head 57 of the screwdriver. Thus, the further the screwdriver 54 drives the threaded shank 43 of screw 31 into the thick end 34 of rivet nut 33, the greater will be the outward jamming pressure on the prongs 47, 48 etc. and consequently the tighter will be the wedging connection between faceplate 10 and supporting structure 21.

[26] The ~~torx~~ star screw head 41 has a center pin 63 which mates with recess 64 in the head 57 of screwdriver 54.

[27] It will be understood that rivet nuts and ~~torx~~ star screwdrivers are off the shelf items and indeed such conventional components are used in the invention. However, the conventional, as purchased condition of the screwdriver is preferably modified by reducing the diameter of the shank 56 at the engagement end thereof. Thus, outer section 62 of shank 56 has a smaller diameter than that portion 65 of the shank next to the handle 55. At the same time the socket 53 is of a smaller than conventional size so as to, firstly, match the configuration of the flutes 58, 59 on head 57 of the screwdriver, and secondly to decrease the diameter of front hole 15 of faceplate 10 so that a standard sized ~~torx~~ star screwdriver having a diameter equal to portion 65 all the way to the left end of shank 56 cannot gain access to the socket 53 in the top surface 26 of the tapered end 42 of the ~~torx~~ star screw 31.

[28] In operation, after assembly of the screw 31, tubing 32 and rivet nut 33 with hole 28 in supporting structure 21, the ~~torx~~ star screwdriver is applied just sufficiently to snug up the assembled parts. After four such assemblies have been so assembled to the supporting structure, as represented by access holes 15, 16, 17 and 18 of Figure 1, the faceplate 10 is then slid onto the outwardly projecting assemblies. Once the faceplate is received on the four fastening assemblies, the ~~torx~~ star screwdriver 54 engages screw 31 through hole 15 to cause the taper 42 on the head of the screw to expand the prongs 38, 39, etc. outwardly into engagement with the bore wall of hole 24. Preferably the prongs are deformed, as indicated in

Figure 3, to an extent less than their elastic limit. Stainless steel is the preferred material for tubing 32 and its associated prongs 38, 39.

[29] When it is desired to activate the niche behind faceplate 10 at a future date – which may be years after initial installation – the ~~torx~~ star screwdriver 54 rotates the screw 31 in the opposite direction, the prongs relax, and the faceplate 10 is lifted off. After the niche is filled with an urn or other object and sealed, the faceplate is again attached to the supporting structure as above described and the screw 31 is tightened as hard as possible so that removal of the faceplate is made as difficult as possible.

[30] Although ~~torx~~ star screwdrivers are available in standard sizes, the inability of a ~~torx~~ star screwdriver of a standard size to be used to loosen screw 31 is prevented by reducing the diameter of the shank section 62 and the head 57 to a size intermediate two standard ~~torx~~ star screwdriver sizes. As a result, a standard or conventional size ~~torx~~ star screwdriver whose diameter is slightly larger than faceplate hole 15, that is, the width of shank portion 65, cannot enter hole 15, and the next smaller standard size ~~torx~~ star screwdriver will have a head too small to engage the seats 60, 61 etc. in head 41 with enough gripping force to rotate screw 31.